

**CLAIM AMENDMENTS**

1. (currently amended) A method for predicting pregnancy outcome in a human female subject comprising measuring the activity of matrix metalloproteinase-9 in the follicular fluid of a matured oocyte from the human female and predicting from the activity of matrix metalloproteinase -9 measured, the probability of establishing pregnancy, wherein increased matrix metalloproteinase-9 activity indicates increased probability of establishing pregnancy.
2. (previously presented) The method according to claim 1, wherein the activity of matrix metalloproteinase-9 is measured by using zymography.
3. (currently amended) The method according to claim 1, wherein the follicular fluid is collected from a follicle having a diameter of the follicle selected is not less than 17mm.
4. (currently amended) The method according to claim 1, which further comprises obtaining said follicular fluid from said a follicle of said mature oocyte.
5. (previously presented) A method for predicting whether implantation of a fertilized oocyte from a human female subject will result in pregnancy in a female subject following assisted reproductive technology comprising
  - (a) removing oocytes together with follicular fluid from a female subject;
  - (b) measuring the activity of matrix metalloproteinase-9 in the follicular fluid;
  - (c) predicting from the activity of matrix metalloproteinase-9 measured the probability of establishing pregnancy by in vitro fertilization-embryo transfer and
  - (c) fertilizing oocytes from a human female subject whose matrix metalloproteinase-9 activity is above a predetermined threshold level.

Claims 6-7 (cancelled).

8. (currently amended) The method according to claim 1, wherein the activity of matrix metalloproteinase-9 is measured by a matrix metalloproteinase-9 diagnostic kit comprising a protein substrate for matrix metalloproteinase-9, wherein said protein substrate is selected from the group consisting of collagen IV, collagen V, collagen VI, elastin, proteoglycan, and gelatin.

9.(currently amended) The method according to claim 5, wherein the activity of matrix metalloproteinase-9 is measured by a matrix metalloproteinase-9 diagnostic kit comprising a protein substrate for matrix metalloproteinase-9, wherein said protein substrate is selected from the group consisting of collagen IV, collagen V, collagen VI, elastin, proteoglycan, and gelatin.